



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,696	11/20/2003	Chiu-An Huang	39524.8800	8576
20322	7590	12/09/2005	EXAMINER	
SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001			SIRAJ, ABDUSAMED	
			ART UNIT	PAPER NUMBER
			2656	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/717,696

Applicant(s)

HUANG, CHIU-AN 

Examiner

Abdusamed Siraj

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/20/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/20/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/7/2003</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

*Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Muramoto et al. (JP 10162565), hereinafter Muramoto.

In regard to claim 1, Muramoto discloses a disc data reading apparatus (title and fig. 5) including a cover (fig. 6, 6c), having a first lock portion (fig. 6, 7), a panel (fig 6, 5) having an opening (fig. 6, 5a) and a second lock portion (fig 6, 8) corresponding to the first lock portion (fig. 6, 7). The second lock portion (fig. 6, 8) engaging with the first lock portion (fig. 6, 7) as the cover covers the opening of the panel (the engagement between the first and second lock portions are clearly shown in fig. 6), wherein the engagement between the first lock portion (fig. 6, 7) and the second lock portion (fig. 6, 8) restricts relative displacement between the cover and the panel. As a result, a cracked disc would inherently be blocked from ejecting out of the disc data reading apparatus.

In regard to claim 2, wherein the first lock portion is a protrusion (fig. 6, 7) and the second lock portion is a depression (fig. 6, 8).

In regard to claim 3, wherein the protrusion (fig. 6, 7) is received in the depression (fig. 6, 8) when the cover partially covers the panel.

In regard to claim 4, wherein the first lock portion is a protrusion (fig. 6, 7) and the second lock portion is a slot (fig. 6, 8 and para. [0004], line 3).

In regard to claim 5, wherein the protrusion (fig. 6, 7) is received in the trench (fig. 6, 8) when the cover partially covers the panel.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muramoto et al. (JP 10162565), herein after Muramoto.

For the rejection of Muramoto as applied to claim 1, see the rejection above, In regard to claim 6, Muramoto shows wherein the second lock portion is a depression (fig 6, 8) and the first lock portion is a protrusion (fig 6, 7).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the first lock and second lock portions of Muramoto. The rationale is as follows:

The purpose of the first and second lock portion is to lock the cover and the panel so that relative displacement between the two can substantially be restricted. The first and second lock portions need not, necessarily, be a protrusion and depression, respectively.

Realizing this, one of ordinary skill in the art would have been motivated to rearrange or shift the position of the first and second lock portions, which is well within the purview of a skilled artisan absent an unobvious result, because the two arrangements are seen to be in art recognized equivalents.

For the rejection of Muramoto as applied to claim 1, see the rejection above, In regard to claim 8, claim 8 has similar feature as that of claim 6 and, thus, is rejected on the same basis.

For the rejection of Muramoto as applied to claim 6, see the rejection above. In regard to claim 7, Muramoto discloses wherein the protrusion (fig.6, 7) is received in the depression (fig. 6, 8) when the cover partially covers the panel.

For the rejection of Muramoto as applied to claim 8, see the rejection above. In regard to claim 9, Muramoto discloses wherein the protrusion (fig. 6, 7) is received in the slot (fig. 6, 8) as the cover partially covering the panel.

4. Claims 1-5 & 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiang et al. (US 6931648), hereinafter Kiang, in view of Muramoto et al. (JP 10162565), herein after Muramoto.

In regard to claim 1, Kiang discloses a disc data reading apparatus (fig. 7) including a cover (fig. 4, 24), a panel (fig 4, 26) having an opening (column 3, lines 13-14) and fragment barricade positioned within the drive so as to prevent fragments of the disc from escaping from the drive (fig 7, 100).

In regard to claim 1, Kiang does not disclose a cover having a first lock portion and a panel having a second lock portion corresponding to the first lock portion, the second lock portion being engaged with the first lock portion as the cover covers the opening of the panel, wherein the engagement between the first lock portion and the second lock portion restricts relative displacement between the cover and the panel.

In regard to claim 2, Kiang does not disclose wherein the first lock portion is a protrusion and the second lock portion is a depression.

In regard to claim 3, Kiang does not disclose wherein the protrusion is received in the depression when the cover partially covers the panel.

In regard to claim 4, Kiang does not disclose wherein the first lock portion is a protrusion and the second lock portion is a slot.

In regard to claim 5, Kiang does not disclose wherein the protrusion is received in the trench when the cover partially covers the panel.

However, in regard to claim 1, Muramoto shows a cover having a first lock portion (fig 6, 7) and a panel having a second lock portion (fig 6, 8) corresponding to the first lock portion. The second lock portion engaging with the first lock portion as the cover covers the opening of the panel, wherein the engagement between the first lock portion and the second lock portion restricts relative displacement between the cover and the panel.

In regard to claim 2, Muramoto shows wherein the first lock portion is a protrusion (fig. 6, 7) and the second lock portion is a depression (fig. 6, 8).

In regard to claim 3, Muramoto shows wherein the protrusion (fig. 6, 7) is received in the depression when the cover partially covers the panel.

In regard to claim 4, Muramoto shows wherein the first lock portion is a protrusion (fig. 6, 7) and the second lock portion is a slot (fig. 6, 8 and para. [0004], line 3).

In regard to claim 5, Muramoto shows wherein the protrusion (fig 6, 7) is received in the trench (fig 6, 8) when the cover partially covers the panel.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the device of Kiang with the above mentioned features of Muramoto so as to prevent dust/dirt from entering the enclosure (abstract). It should also be noted that this modification would firmly stabilize the engagement between

the cover and the panel in order to withstand any displacement of the tray by unwanted force or pressure thereby preventing it from ejecting undesirably.

### Citation of Relevant Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ahn (US 6954936) discloses a tray locking apparatus of an optical disk drive including a fixed frame and a tray that moves in and out of the fixed frame to load and unload a disk. The tray locking apparatus includes a first locking portion provided on the fixed frame, and first lever, that has a second locking portion selectively coupled to the first locking portion, and moves between a coupling position and releasing position.

Takahashi et al. (US 20020051418) disclose an optical disk apparatus in which the optical disk tray can slide smoothly, in and out, and the insertion and removal of an optical disk is facilitated, and wherein inadvertent scratches are not produced on the optical disk surface, and flying pieces of optical disk damaged during rotation are completely prevented from exiting the apparatus.

Omari et al. (US 6650609) disclose a disk device which can avoid as far as possible dirt and dust from being sucked into a disk device body together with open air.

Chiu (US 20050144625) discloses a disc accessing apparatus which includes a housing, panel with an opening for a disc to pass, a surface slanted towards the opening and an engagement portion. When a disc cannot be ejected from the disc accessing apparatus normally, the surface leads the disc out. In case the disc cracks into pieces during high-speed rotation, the pieces strike the surface to generate a force that makes the engagement portion and the housing engaged more tightly.

Takeshi (JP 2001236775) discloses an optical disk drive assembly capable of preventing the blowout of wind to the outside and preventing the generation of whistling sounds.

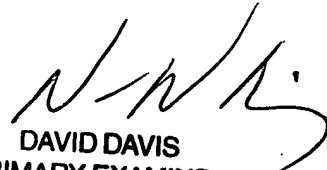
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdu-samed Siraj whose telephone number is (571) 272-8199. The examiner can normally be reached on Mon - Fri (9:00 am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdu-samed Siraj  
Art Unit 2652

  
DAVID DAVIS  
PRIMARY EXAMINER